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June 27, 2003

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# Defense Infrastructure

Status of Extended Pilot Program on  
Sales of Manufactured Articles and  
Services at Army Industrial Facilities  
(D-2003-103)

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Department of Defense  
Office of the Inspector General

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### **Acronyms**

GSIE	Ground Systems Industrial Enterprise
MCAAP	McAlester Army Ammunition Plant
JMC	Joint Munitions Command
RIA	Rock Island Arsenal
WVA	Watervliet Arsenal



INSPECTOR GENERAL  
DEPARTMENT OF DEFENSE  
400 ARMY NAVY DRIVE  
ARLINGTON, VIRGINIA 22202-4704

June 27, 2003

**MEMORANDUM FOR AUDITOR GENERAL, DEPARTMENT OF THE ARMY**

**SUBJECT: Report on Status of Extended Pilot Program on Sales of Manufactured  
Articles and Services at Army Industrial Facilities  
(Report No. D-2003-103)**

We are providing this report for review and comment. We performed this audit as mandated by the National Defense Authorization Act of 1998, section 141, subsection (c) and reauthorized by the National Defense Authorization Act of 2003. The Army did not provide comments to a draft of this report.

DoD Directive 7650.3 requires that all recommendations be resolved promptly. We request the Department of the Army provide comments on all recommendations by July 28, 2003.

We appreciate the courtesies extended to the staff. Questions should be directed to Mr. Joseph P. Doyle at (703) 604-9349 (DSN 664-9349) or Ms. Deborah L. Culp at (703) 604-9335 (DSN 664-9335). See Appendix D for the report distribution. Team members are listed inside the back cover.

A handwritten signature in cursive script that reads "David K. Steensma".

David K. Steensma  
Deputy Assistant Inspector General  
for Auditing

## **Office of the Inspector General of the Department of Defense**

**Report No. D-2003-103**

(Project No. D2002CK-0215)

**June 27, 2003**

### **Status of Extended Pilot Program on Sales of Manufactured Articles and Services at Army Industrial Facilities**

#### **Executive Summary**

**Who Should Read This Report and Why?** Civil service and uniformed officers responsible for industrial facilities for the Army should read this report. This report discusses the importance of maintaining data sufficient for proper assessment of the effectiveness of the Extended Pilot Program on Sales of Manufactured Articles and Services at Army Industrial Facilities (Pilot Program).

**Background.** This report is the fourth report on the Pilot Program. This audit was required by the National Defense Authorization Act for FY 1998, section 141, subsection (c), and reauthorized by the National Defense Authorization Act for FY 2003. The National Defense Authorization Act for FY 2003 extends through FY 2004 the waiver of section 4543(a)(5), title 10, United States Code, "Army Industrial Facilities: Sales of Manufactured Articles or Services Outside the Department of Defense," which requires that the Secretary of the Army determine whether an article or service is available from a commercial source located in the United States. Pilot Program legislation allows Army industrial facilities to bid on commercial contracts without regard for commercial sources if the end product or service is used in a DoD weapon system program. The three Army industrial facilities participating under the Pilot Program are McAlester Army Ammunition Plant, Oklahoma; Rock Island Arsenal, Illinois; and Watervliet Arsenal, New York. From Pilot Program inception in FY 1998 through the end of FY 2000, the three facilities issued 12 contracts and 1 order, with a cumulative value of about \$6 million. Of the \$6 million, \$5.2 million was for one contract that was incrementally funded over a 5-year period.

**Results.** We believe the Pilot Program should continue because the program has increased opportunities for Army industrial facilities to form working relationships with commercial concerns. From October 2000 through November 2002, \$16.9 million in contract actions was awarded under the Pilot Program with little interest shown by commercial concerns. Based on our interviews with Army industrial facility personnel and our prior reports, the requirements that contractors pay before receiving articles and services (advanced payments) and that Army industrial facilities charge full costs, as well as the high overhead rates of the Army industrial facilities, have hindered the success of the program. Hourly overhead rates have, with one exception, decreased since FY 2001 as a result of the Arsenal Support Programs Initiative and other private-public partnership arrangements. We did not identify either any opportunities or detriments to small business as a result of the waiver. See Appendix C for detailed answers to the specific questions identified in the National Defense Authorization Act for 1998, section 141, subsection (c), and reauthorized by the National Defense Authorization Act of 2003.

The effectiveness of the Pilot Program should improve if the Army develops metrics and goals that measure achievements of the program. Also, the Army should increase monitoring efforts of the bids submitted and contracts awarded under the Pilot Program. Additionally, the Army should examine the cost-cutting measures used at Anniston Army Depot, Alabama, as well as measures used at other facilities and implement the measures where appropriate. The Army should also increase awareness of the Pilot Program to increase workload at the three Army industrial facilities (see the Finding section of the report for the detailed recommendations).

**Management Comments.** We provided the draft of this report on April 18, 2003. The Army did not comment because of ongoing higher priority issues. Comments on the final report are requested from the Army by July 28, 2003.

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## Background

**National Defense Authorization Act for FY 2003.** This audit is the fourth audit of the Pilot Program Sales of Manufactured Articles and Services at Army Industrial Facilities (Pilot Program) conducted in response to a tasking in Public Law 105-85, “National Defense Authorization Act for FY 1998.” The National Defense Authorization Act for FY 2003 extends through FY 2004 a waiver to determine the commercial availability of products or services when being sold for DoD weapon systems, which section 4543 (a)(5), title 10, United States Code (10 U.S.C. 4543), “Army Industrial Facilities: Sales of Manufactured Articles or Services Outside Department of Defense” requires. The National Defense Authorization Act for FY 2003 requires that:

The Inspector General of the Department of Defense shall review the experience under the Pilot Program carried out under section 141 of Public Law 105-85 and, not later than July 1, 2003, submit to Congress a report on the results of the review. The report shall contain the views, information, and recommendations called for under subsection (d) of such section (as redesignated by subsection (b) (1)). In carrying out the review and preparing the report, the Inspector General shall take into consideration the report submitted to Congress under such subsection (as so redesignated).

The congressionally mandated questions and the Office of the Inspector General answers are at Appendix C.

## Guidance for Sale of Articles and Services Outside of DoD

Section 141 of the National Defense Authorization Act for FY 1998 required that the Army conduct a Pilot Program that tests the efficacy and appropriateness of selling manufactured articles and services of Army industrial facilities under 10 U.S.C. 4543. The Pilot Program waives 10 U.S.C. 4543, which requires that the Secretary of the Army determine whether an article or service is available from a commercial source in the United States. The waiver relates specifically to the sale of articles for a weapon system the DoD is procuring or the sale of services used in the manufacture of any weapon system the DoD is procuring. The Pilot Program allows the Army industrial facilities to compete for commercial contracts of manufactured articles and services without regard to the availability of the articles and services from U.S. commercial sources. Implementation of the Pilot Program is limited to three Army industrial facilities.

## Pilot Program Facilities

The Acting Assistant Secretary of the Army approved McAlester Army Ammunition Plant, Oklahoma (MCAAP); Rock Island Arsenal, Illinois (RIA); and Watervliet Arsenal, New York (WVA) for inclusion in the Pilot Program. As a result of a reorganization, both RIA and WVA are organizationally aligned

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under the Tank-automotive and Armaments Command, whereas MCAAP is aligned under the Joint Munitions Command (JMC) (JMC was formerly known as the Operations Support Command).

**McAlester Army Ammunition Plant.** The MCAAP mission includes producing and renovating conventional and missile ammunition as well as ammunition-related components. MCAAP also performs engineering and product assurance that directly supports production of ammunition products. The major functional areas at MCAAP are receiving, storing, shipping, demilitarizing, and disposing of both conventional and missile ammunition along with related items. As of September 2002, MCAAP had an authorized workforce strength of 873 employees.

**Rock Island Arsenal.** RIA supports the warfighter through manufacture of armaments and assembly of sets, kits, outfits, basic issue items, and various systems. RIA also provides base operations and regional support along with maintaining capability and capacity in support of the national military strategy. The major functional areas at RIA are manufacturing, logistics, and base operations. As of September 2002, RIA had an authorized workforce strength of 1,189 employees.

**Watervliet Arsenal.** WVA is the Nation's oldest manufacturing arsenal and produces high-technology, high-powered weaponry that includes recoilless rifles, mortars, howitzers, and tank guns. The principal product of WVA is the cannon. The arsenal also manufactures the guns for the Army's M1A1 Abrams tank. Collocation of Benet Labs with WVA allows life-cycle management of products from prototyping and testing to full-scale production. As of September 2002, WVA had an authorized workforce strength of 440 employees.

## Objective

The audit objective was to determine the status of the Pilot Program.



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## **Pilot Program Status**

The three participating Army industrial facilities obtained limited additional work from the Pilot Program. From October 2000 through November 2002, contract actions totaling \$16.9 million were awarded under the Pilot Program. Army industrial facility personnel and prior IG DoD reports attributed the Pilot Program's lack of success to advance payments, charging full costs, and high overhead rates. Lack of documentation the Army industrial facilities maintained in relation to bids submitted for the Pilot Program preclude a definitive determination for what caused the Pilot Program to be minimally effective. As a result, the Pilot Program had limited effect on increasing the use of the three Army industrial facilities.

## **Pilot Program Contracts**

From October 2000 through November 2002, contract actions totaling \$16.9 million were awarded under the Pilot Program. See Appendix B for a listing of Pilot Program contract actions issued from October 2000 through November 2002. Of the contracts awarded between October 2000 and November 2002, MCAAP was awarded four contracts, one order on an FY 2001 contract, and three orders on pre-FY 2001 contracts, and received two incremental payments with a cumulative value of about \$4.8 million; RIA was awarded a basic ordering agreement with two orders valued at about \$500,000; and WVA was awarded two contracts and three orders valued at about \$11.6 million. The industrial facility personnel interviewed at each of the three facilities stated that the primary reason the Pilot Program had not generated significant additional work was the result of high overhead rates and charging full costs. According to MCAAP and WVA personnel, the requirement for advance payments, which involves paying for articles and services in advance of performance, also impeded the Pilot Program. IG DoD Report No. D-2001-069, "Pilot Program on Sales of Manufactured Articles and Services of Army Industrial Facilities," March 1, 2001, and IG DoD Report No. 99-203, "Status of Implementation of the Pilot Program on Sales of Manufactured Articles and Services of Army Industrial Facilities," July 8, 1999, both discuss that the requirement to charge full costs and the requirement for advance payments hindered the Pilot Program from accomplishing the intended purpose.

## **Impediments Eliminated or Mitigated**

IG DoD Report No. 99-121, "Pilot Program on Sales of Manufactured Articles and Services of Army Industrial Facilities," April 2, 1999, and IG DoD Report No. 99-203 identify several impediments to the success of the Pilot Program that were either eliminated or mitigated. Extension of the Pilot Program remedied the inadequate assessment of the Pilot Program because of delayed implementation, as IG DoD Report No. 99-121 identifies. Following IG DoD Report No. 99-203, the changes enacted by section 342 of the National Defense Authorization Act for

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FY 2001 restricted the Army arsenals from charging a commercial entity prices that included unutilized and underutilized plant capacity costs funded by direct appropriation. Also, the Army Materiel Command canceled the Office of Management and Budget Circular No. A-76, "Performance of Commercial Activities," August 4, 1983, cost studies related to manufacturing functions at the Army arsenals. Potentially, the Army industrial facilities could have been closed as a result of the studies. In addition, section 343 of the National Defense Authorization Act for FY 2001 established the Arsenal Support Program Initiative designed to maintain the viability and capabilities of the Army industrial facilities through commercially contracting the use of the facility and skilled workforces. That initiative allowed Army arsenals to both lease to and team with commercial concerns for the purpose of relieving some of the financial burden at the installations. Because it applied only to Army arsenals, the initiative did not affect MCAAP.

Chapter 64 of volume 11B, DoD 7000.14R, "Reimbursable Operations, Policy and Procedures – Defense Working Capital Fund," Financial Management Regulation, duplicates guidance contained in section 2208, title 10, United States Code, "Working-Capital Funds;" 10 U.S.C. 4543; and section 127a, title 10, United States Code, "Operations For Which Funds Are Not Provided in Advance: Funding Mechanisms." In October 2002, chapter 64 was deleted from volume 11B of the Financial Management Regulation, but this deletion does not address conflicts between section 2208, title 10, United States Code, and 10 U.S.C. 4543. Section 2208, title 10, United States Code requires that working-capital funding activities recover the full costs of articles or services sold and request special permission for advance billing, while 10 U.S.C. 4543 authorizes facilities participating in the Pilot Program to "charge buyers, at a minimum, the variable costs that are associated with the articles or services" and authorizes advance payment for articles and services.

## **Impediments of the Pilot Program**

The Army industrial facility personnel we interviewed as well as IG DoD Report No. D-2001-069 and IG DoD Report No. 99-203 note that advance payments and charging full costs were impediments to the success of the Pilot Program. Army industrial facility personnel also stated that high overhead rates were an impediment. We could not determine why the three Army industrial facilities were not awarded contracts from Pilot Program bids submitted because of a lack of data maintained on bids submitted.

**Advance Payments.** Personnel at MCAAP and WVA considered advance payments an impediment to the Pilot Program because advance payments vary from standard commercial business practices. Additionally, IG DoD Report No. D-2001-069 and IG DoD Report No. 99-203 identify advance payments as an impediment because contractors were not willing to pay before the articles and services were received.

**Army Industrial Personnel.** Personnel at two of the facilities participating in the Pilot Program identified the requirement for advance

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payments as an impediment in acquiring Pilot Program contracts. An official at MCAAP stated that the installation did not lose any Pilot Program contracts because of the requirement for advance payment. The official believed that advanced payments caused customers to be hesitant in doing business with the installation, but no contracts have been lost as a result. WVA officials commented that the legal requirement to charge advance payments for goods and services made obtaining new work difficult for the facility.

**Prior IG DoD Reports.** IG DoD Report No. D-2001-069 and IG DoD Report No. 99-203 discuss advance payment for articles and services as an impediment of the Pilot Program because commercial practices allow buyers to provide payment for the item up to 90 days after receipt. Advance and incremental payments do not allow buyers to inspect and accept the items before payment is made.

**Full Costs.** Personnel from the three Army industrial facilities stated that the requirement to charge full costs increases Pilot Program bid amounts, which deters potential customers from taking advantage of the Pilot Program. IG DoD Report No. D-2001-069 and IG DoD Report No. 99-203 both identify full costs as an impediment because the three industrial facilities were at a disadvantage when competing against commercial entities. Commercial entities include only costs attributable to the product or service provided.

**Army Industrial Personnel.** Personnel from the three Army industrial facilities stated that high prices were a barrier for obtaining Pilot Program contracts. However, only MCAAP officials contacted the contractor to request a reason for bid rejection. One MCAAP official stated that cost was the most common reason contractors provided for not awarding contracts. RIA officials stated that rates were fully burdened and, although based on personal opinion, if the rates were not fully burdened, RIA would have received an increased number of contracts under the Pilot Program. RIA officials also stated that RIA incurred costs as a result of a reduction in force, and the cost associated with the reduction was absorbed in the cost to customers. WVA also stated that the wording of the Financial Management Regulation was a barrier because it requires the arsenals to charge a fully burdened overhead rate as part of the cost to customers.

**Prior IG DoD Reports.** IG DoD Report No. D-2001-069 and IG DoD Report No. 99-203 state that conflicting guidance on handling full costs prevented the Army industrial facilities from acquiring more Pilot Program contracts. Chapter 64 of the Financial Management Regulation directs a working-capital fund site to charge customers for the full cost of goods and services provided, but 10 U.S.C. 4543 allows the facilities to charge “at a minimum, the variable costs that are associated with the commercial articles or commercial services sold.” The Under Secretary of Defense (Comptroller) nonconcurred with recommendations of IG DoD Report No. D-2001-069 and IG DoD Report No. 99-203 for waiving the guidance in chapter 64 that requires full costs.

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**Overhead Rates.** Personnel at the three industrial facilities stated that high overhead rates inhibited the facilities from obtaining Pilot Program contracts. According to officials at MCAAP and RIA, high overhead rates at both facilities prevented them from being competitive with commercial vendors. At WVA, where overhead rates were the highest, officials stated that an increasing number of uncontrollable costs at the installation level are restricting the ability to reduce unit costs. WVA officials further stated that, although the costs can be forecasted, the installation had no control over policies or decisions that change the costs during the execution year. One WVA official stated, “As the total workload decreases, these costs constitute an increasingly larger percentage of the total program and are fixed. The reduction in direct labor workload, combined with a higher percentage of fixed costs, elevates the unit cost of the installation’s products.”

Although the overhead rates at the three industrial facilities have decreased, the effect of the decrease on facility competitiveness with commercial vendors is uncertain. WVA had the highest overhead rates. WVA still managed to obtain about \$11.6 million in Pilot Program contracts, even though Pilot Program status of the contracts is disputed between JMC and WVA (see Appendix C, Issue 4). Between FY 2001 and FY 2002, the rates decreased by about 14.3 percent at MCAAP, 6.5 percent at RIA, and 4.8 percent at WVA. The rates are projected to decrease between FY 2002 and FY 2003 another 15.7 percent at MCAAP and 12.7 percent at RIA. For that same time frame, WVA projected an increase for overhead rates of about 8.4 percent. Even though the overhead rates appear to decrease, the number of Pilot Program contracts obtained has not increased significantly.

## **Assessment of the Army Pilot Program**

The Pilot Program waiver of section 4543(a)(5), title 10, United States Code made engaging in contracts with commercial vendors easier for Army industrial facilities but minimally affected those facilities overall. Since the inception of the Pilot Program in June 1998 through November 2002, 19 contracts, valued at about \$22 million, were awarded. For the first 25-month period (September 1998 through September 2000), the three industrial facilities collectively received about \$6 million in Pilot Program contracts. During the next 26-month period (October 2000 through November 2002), about \$16.9 million in contracts were awarded. Based on comments received from RIA on a discussion draft, other basic agreements and sales negotiations that could result in Pilot Program contracts have occurred since December 2002.

The Pilot Program contracts constituted a small percentage of the overall value of contracts for the three facilities. In fact, Pilot Program contracts were about 1 percent of the total contracts at MCAAP and RIA (similar data from WVA were unavailable). The numbers also included three orders totaling \$1,119,307 on one contract that MCAAP entered into prior to the Pilot Program. Additionally, while Pilot Program contracts at WVA were primarily responsible for the \$10.9 million increase in contract awards, WVA personnel did not consider them to be Pilot Program contracts. Contracting officials at JMC and personnel from the three

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facilities acknowledged that, regardless of the waiver, the contracts would have been awarded to the facilities. Army industrial facility personnel indicated that barriers such as charging full cost, advance payments, and high overhead rates were actually hindering the Pilot Program. Because of a lack of data related to bids submitted for the Pilot Program, we cannot substantiate the causes for the lack of success of the Pilot Program that Army personnel provided.

## **Pilot Program Areas of Concern**

We believe that the following information Army personnel provided about Pilot Program goals, data management, Pilot Program determination, retaining a skilled workforce, marketing of the Pilot Program, and a high percentage of unutilized capacity is worth noting. Lack of established goals and objectives of the Pilot Program hindered the ability to measure the degree of successfulness of the Pilot Program. The inability to distinguish Pilot Program data from other operations of the three industrial facilities hindered the Army from making changes in policies that would benefit the Pilot Program and the facilities. Also, misunderstandings exist between the Army industrial facilities and JMC regarding when a contract should be classified as a Pilot Program contract. Officials at the industrial facilities expressed that lack of funding resulted in difficulties in retaining a skilled workforce and marketing the facilities capabilities. Finally, based on information the three industrial facilities provided, unutilized plant capacity at the three industrial facilities remained consistently high from October 2000 through November 2002.

**Pilot Program Goals.** Goals were not established for the Pilot Program. Army industrial personnel indicated that no goals existed for the Pilot Program at the three industrial facilities. Personnel at MCAAP and RIA stated that any work the Pilot Program generated makes the program a success. Because no goals were established for the Pilot Program, the extent to which the Pilot Program was successful could not be measured. Army personnel should establish metrics and goals that measure the achievements of the Pilot Program. Goals should be established for reducing overhead costs, increasing workload, and utilizing plant capacity as a result of the Pilot Program. To determine successfulness of the Pilot Program, Army personnel should have a method for comparing actual data with the goals.

**Data Management.** None of the personnel at the three Army industrial facilities maintained detailed data that would allow for easy identification of Pilot Program bids or the reasons for rejection of the bids submitted. Only the personnel at MCAAP could manually sort through contract files and provide copies of Pilot Program bids. RIA and WVA personnel were unable to distinguish between bids placed through the Pilot Program and bids submitted through other operations at the facilities. Additionally, only the MCAAP personnel stated that they attempted to follow up with contractors to determine the reasons for bid rejections but rarely included the explanation in contract files. Army personnel should follow up when bids submitted do not result in contract award and capture data that identifies strengths and shortfalls of the Pilot Program bids.

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**Pilot Program Contract Determination.** JMC and WVA differed on what was considered a Pilot Program contract. JMC contracting personnel included as a Pilot Program contract any contract that waives the need to determine whether a commercial source is available. If the contractor provides a statement of commercial nonavailability, then the contract did not take advantage of the Pilot Program. RIA personnel initially reported two Pilot Program contracts, but JMC contracting officials stated that one of the contracts, valued at \$15,267, included a statement of commercial nonavailability. In contrast, WVA personnel did not consider any contract as part of the Pilot Program if WVA would have received the contract without the Pilot Program. Consequently, WVA personnel did not consider three contracts, valued at about \$11.6 million, as Pilot Program contracts although JMC officials included those contracts as part of the Pilot Program contract listing for WVA. JMC contracting officers admitted that contracts are generally awarded to the facilities when contractors have no other commercial options.

**Retaining a Skilled Workforce at the Facilities.** Maintaining a skilled workforce is critical to the success of programs such as the Pilot Program that are aimed at lowering costs and increasing workload at industrial facilities. The average age of employees at the three Pilot Program facilities ranged from 45 to 49 years, making most of the workforce eligible for retirement within 5 to 10 years. In the past, the facilities used apprenticeship programs to replenish the core skill areas. Reductions in force throughout the 1990s and lack of funding provided to the arsenals forced the suspension of apprenticeship programs. MCAAP developed a program in which students receive job-related training at MCAAP. Once the academic studies are completed, students may be non-competitively converted to career-conditional appointments with MCAAP. RIA has reestablished an apprenticeship program; however, lack of funding has hindered the success of the program. Additionally, WVA has been unable to reinstate an apprenticeship program because of the lack of funding.

**Awareness of the Pilot Program.** Limited marketing of the Pilot Program by Army personnel has not generated significant additional work for the three industrial facilities. Since the beginning of FY 2001, only seven new contracts have been awarded. Marketing of the Pilot Program is accomplished almost exclusively in conjunction with other facility programs. MCAAP personnel stated that commercial marketing of the Pilot Program is basically done by word of mouth. At RIA, personnel stated they participate in trade shows, and the facility Web site includes Pilot Program information but most marketing for RIA is accomplished through current contractors and contractor contacts. WVA lacks the funds needed to market the Pilot Program. Based on the number of contracts issued as of November 2002, each industrial facility needs to increase awareness of the Pilot Program.

**Unutilized Plant Capacity.** Regardless of the fluctuations in the amount of unutilized plant capacity at the three industrial facilities, the facilities reported about 80 percent unutilized plant capacity. Based on data that personnel at Army industrial facilities provided, unutilized plant capacity levels at both MCAAP and WVA remain consistently greater than 70 percent. The unutilized capacity at RIA exceeds 80 percent. Army personnel stated that unutilized plant capacity may

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fluctuate based on DoD operations. Although each of the three industrial facilities has obtained work under the Pilot Program, the program has not decreased the amount of unutilized plant capacity.

## **Alternate Methods for Regenerating Workloads**

The Army should examine other methods for regenerating workload at depots and arsenals such as the public-private partnerships used at Anniston Army Depot, Alabama, the Ground Systems Industrial Enterprise (GSIE) concepts, and the Arsenal Support Program Initiative. Teaming with private industry or other Army industrial facilities and allowing tenants the use of industrial facilities in conjunction with the Pilot Program may reduce unutilized plant capacity and overhead rates.

**Anniston Army Depot Public-Private Partnerships.** The Anniston Army Depot initiated discussions with private industries with the intent of building a network of tenant activities that could successfully generate workload and utilize otherwise idle workspace at the depot. Anniston Army Depot has more than 30 partnerships and teaming arrangements. The teaming arrangements capitalize on the strengths and efficiencies of both the public and private sector. According to officials from GSIE, which is under the command of Tank-automotive and Armaments Command, Anniston Army Depot represents the way the Army should conduct business. Anniston Army Depot participates in three types of partnership programs: workshare programs, direct sales, and facility use programs. Anniston officials believe that public-private partnerships effectively reduced the cost of maintaining the facility at Anniston Army Depot.

**Tank-automotive and Armaments Command, GSIE.** The Tank-automotive and Armaments Command is developing a concept through GSIE designed to scale down operations while maintaining core capabilities that support both the Army as well as customers outside of the Army. GSIE plans to operate six arsenals and depots--Rock Island Arsenal; Watervliet Arsenal; Sierra Army Depot, California; Anniston Army Depot; Lima Army Tank Plant, Ohio; and Red River Depot, Texas--as a single business unit. GSIE designed a concept for effectively using the core capabilities at the Army industrial facilities. For that concept to work, GSIE officials stated that DoD financial regulations must reflect current laws and business practice. Additionally, GSIE officials believe that one comprehensive statute governing all sales outside the DoD will eliminate confusion among the varying provisions and language caused by current direct sales statutes. Tank-automotive and Armaments Command personnel have drafted proposed changes to applicable DoD financial policies and statutory guidance. The changes would allow the facilities to operate more cost effectively. Also, because two facilities within GSIE participate in the Pilot Program, the waiver of 10 U.S.C. 4543 could provide additional assistance to GSIE as a whole.

**Arsenal Support Program Initiative.** The Arsenal Support Program Initiative enables commercial tenants on Army arsenal property to play a part in helping reduce unutilized plant capacity and overhead costs. Authorized by the National Defense Authorization Act for FY 2001, the initiative is modeled after the

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Armament Retooling and Manufacturing Support Program for Army depots. WVA implemented the program and has acquired one tenant, but because implementation is in the early stages, success cannot yet be measured. According to JMC officials, however, one facility under the Armament Retooling and Manufacturing Support Program totally covered their operation costs through the use of tenants.

## **Conclusion**

Use of the three participating Army industrial facilities minimally increased from the Pilot Program. Between the first 25-month period (about \$6 million in contracts) and the next 26-month period (about \$16.9 million in contracts), the workload increased by about \$10.9 million. The three facilities, as of November 2002, were still reporting unutilized plant capacity rates above 70 percent. Although the increased workload had a limited effect on the overhead rates or unutilized plant capacity at MCAAP, RIA, and WVA, any additional work is beneficial to the Army industrial facilities. However, officials at JMC and the three Army industrial facilities stated that contracts are usually awarded to the facilities because the articles and services are commercially unavailable. The Pilot Program in conjunction with public-private partnerships, GSIE concepts on streamlining operations at multiple Army industrial facilities, and the Arsenal Support Program Initiative could offer additional benefits for increasing workload and decreasing operational costs at the three Army industrial facilities.

## **Recommendations**

We recommend the Assistant Secretary of the Army for Acquisition, Logistics, and Technology:

1. Develop progress metrics that measure achievements of the Pilot Program on Sales of Manufactured Articles and Services at Army Industrial Facilities.
2. Require that the McAlester Army Ammunition Plant, Oklahoma; Rock Island Arsenal, Illinois; and Watervliet Arsenal, New York, collect and analyze data for the Pilot Program on Sales of Manufactured Articles and Services at Army Industrial Facilities. The data should include information on why bids submitted resulted in no award and the effect the program had on overhead rates, workload, and utilization. Additionally, the facilities should determine if successful bids would have been awarded without the benefits of the Pilot Program on Sales of Manufactured Articles and Services at Army Industrial Facilities.
3. Examine alternative methods for increasing the use of the Army industrial facilities, such as the leasing of unutilized facilities and the teaming arrangements used at Anniston Army Depot, Alabama, or similar models.



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4. Determine if implementation of alternative methods such as leasing unutilized facilities and teaming arrangements would be beneficial to McAlester Army Ammunition Plant, Oklahoma; Rock Island Arsenal, Illinois; and Watervliet Arsenal, New York, industrial facilities in conjunction with the Pilot Program on Sales of Manufactured Articles and Services at Army Industrial Facilities.

5. Increase awareness of the Pilot Program on Sales of Manufactured Articles and Services at Army Industrial Facilities in conjunction with other methods used to increase use of the Army industrial facilities.

## **Management Comments Required**

The Department of the Army did not comment on a draft of this report. We request that the Department of the Army provide comments on the final report.



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## Appendix A. Scope and Methodology

We reviewed contracts issued under the Pilot Program on Sales of Manufactured Articles and Services at Army Industrial Facilities from October 2000 through November 2002.

We interviewed key personnel from MCAAP, RIA, and WVA regarding FY 2001, FY 2002, and FY 2003 Pilot Program contracts, operating capacity, unutilized capacity, overhead and total rates, marketing the Pilot Program, and workforce strength for FY 2001 and FY 2002. We also toured the facilities at MCAAP, RIA, and WVA to obtain both an understanding of the work performed as well as the size of the facilities. We identified 19 contracts and 10 orders, valued at about \$22 million, for Pilot Program contracts from inception of the program in June 1998 through November 2002 for the three sites. We reviewed contract documentation for contract actions under the Pilot Program from October 2000 through November 2002. We reviewed seven contracts and nine orders valued at about \$16.9 million.

We interviewed JMC personnel regarding contracts awarded under the Pilot Program and information on Armament Retooling and Management Support and Arsenal Support Program Initiative. We also interviewed Tank-automotive and Armaments Command, GSIE personnel to determine the changes that would make the Pilot Program a more viable operation.

We visited Anniston Army Depot to gain an understanding of their public-private partnerships, contracts, operating capacity, unutilized capacity, overhead and total rates, workforce strength, and marketing.

We performed this audit from August 2002 through April 2003 in accordance with generally accepted government auditing standards. The audit scope was limited to the request in the National Defense Authorization Act for FY 2003. We used and relied on data that Army industrial personnel provided for the operating capacity, unutilized capacity, overhead and total rates, and workforce strength. We did not review the management control program.

**Use of Computer-Processed Data.** We relied on computer-processed data from JMC, located at RIA, in determining the number and dollar values of those contracts issued under the Pilot Program. We obtained hard copies of contracts issued from October 2000 through November 2002 and compared those contracts to the computer-processed data. JMC officials and the audit team noted minor clerical errors in the data, which had no material effect on the audit. We did not assess the reliability of the computer-processed contract data from Pilot Program inception through the end of FY 2000.

**General Accounting Office High-Risk Area.** The General Accounting Office has identified several high-risk areas in the DoD. This report provides coverage on the DoD high-risk area to overcome support infrastructure inefficiencies.

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## **Prior Coverage**

During the last 5 years, the General Accounting Office issued one report discussing the Army industrial facilities. Unrestricted General Accounting Office reports can be accessed on the Internet at <http://www.gao.gov>. Unrestricted IG DoD reports can be accessed on the Internet at <http://www.dodig.osd.mil/audit/reports>.

## **General Accounting Office**

General Accounting Office Report No. GAO/NSIAD-99-31, "Army Industrial Facilities: Workforce Requirements and Related Issues Affecting Depots and Arsenals," November 30, 1998

## **IG DoD**

IG DoD Report No. D-2001-069, "Pilot Program on Sales of Manufactured Articles and Services of Army Industrial Facilities," March 1, 2001

IG DoD Report No. 99-203, "Status of Implementation of the Pilot Program on Sales of Manufactured Articles and Services of Army Industrial Facilities," July 8, 1999

IG DoD Report No. 99-121, "Pilot Program On Sales of Manufactured Articles and Services of Army Industrial Facilities," April 2, 1999

## Appendix B. Listing of October 2000 Through November 2002 Pilot Program Contract Actions

### Contractor and Contract Values

The following is a list of the actions on Pilot Program contracts issued from October 2000 through November 2002. New contracts, orders on new contracts, as well as payments\* received and new orders placed on contracts identified during prior IG DoD reviews, are included.

<u>Contract Number</u>	<u>Contractor</u>	<u>Dollar Value</u>
<b>McAlester Army Ammunition Plant:</b>		
DAAA09-02-C-DR05	General Electric SeaCo	\$ 1,956
DAAA09-02-C-DR04	Williams Wood Products	14,825
DAAA09-01-C-DR13	World Wide Demolition	1,858,500
DAAA09-01-C-DR13/001	World Wide Demolition	753,940
DAAA09-01-C-DR12	Raytheon Systems	160,000
DAAA09-00-C-DR11/001	Alliant Techsystems	46,414
DAAA09-99-C-DR20/007 <sup>1</sup>	Parsons Brinkerhoff/Nordic Ammunition Company	436,800
DAAA09-99-C-DR20/006 <sup>1</sup>	Parsons Brinkerhoff/Nordic Ammunition Company	980,000
DAAA09-96-C-DR10/003 <sup>2</sup>	Boeing Company	283,122
DAAA09-96-C-DR10/003 <sup>2</sup>	Boeing Company	<u>331,360</u>
<b>Subtotal</b>		<b>\$ 4,866,917</b>
<b>Rock Island Arsenal:</b>		
DAAA09-01-C-DR17/002	Focus: Hope C.A.T	451,006
DAAA09-01-C-DR17/001	Focus: Hope C.A.T	45,473
DAAA09-01-C-DR17 <sup>3</sup>	Focus: Hope C.A.T	<u>0</u>
<b>Subtotal</b>		<b>\$ 496,479</b>
<b>Watervliet Arsenal:</b>		
DAAA09-01-C-DR06/004	General Dynamics Land Systems	4,790,610
DAAA09-01-C-DR06/002	General Dynamics Land Systems	652,704
DAAA09-01-C-DR06/001	General Dynamics Land Systems	2,176,282
DAAA09-01-C-DR06	General Dynamics Land Systems	2,967,445
DAAA09-01-C-DR04	United Defense Limited Partnership	<u>974,154</u>
<b>Subtotal</b>		<b>\$11,561,195</b>
<b>Total</b>		<b>\$16,924,591<sup>4</sup></b>
<sup>1</sup> Contract awarded prior to FY 2001. Amounts reflect work performed and incremental payments from October 2000 through November 2002.		
<sup>2</sup> JMC Direct Sales Office mistakenly duplicated contract number.		
<sup>3</sup> Contract was a basic ordering agreement. The contract had no value and no product or service resulted.		
<sup>4</sup> Total includes actions on prior year contracts. Amount of new contract awards for October 2000 through November 2002 total \$14,846,895, resulting from seven contracts and six orders.		

\* Prior IG DoD reviews covered Pilot Program contracts issued from inception of the Pilot Program in FY 1998 through January 2001.

## Contract Types and End Users

<u>Contract Number</u>	<u>Product or Service Type</u>	<u>End User of Product or Service</u>
<b>McAlester Army Ammunition Plant:</b>		
DAAA09-02-C-DR05	Container repair	Army
DAAA09-02-C-DR04	Pallets	Army
DAAA09-01-C-DR13	Demilitarization of 750-pound bombs	Air Force
DAAA09-01-C-DR13/001	Demilitarization of 750-pound bombs	Air Force
DAAA09-01-C-DR12	Disassemble Maverick Missile	Air Force
DAAA09-00-C-DR11/001	Base hardness screen of M830A1 rounds	Army
DAAA09-99-C-DR20/007	Demilitarization of bombs	Army
DAAA09-99-C-DR20/006 <sup>1</sup>	Demilitarization of bombs	Army
DAAA09-96-C-DR10/003 <sup>2</sup>	Harpoon warhead	Navy
DAAA09-96-C-DR10/003 <sup>2</sup>	Harpoon warhead	Navy
<b>Rock Island Arsenal:</b>		
DAAA09-01-C-DR17/002	Mobile parts hospital prototype	Army
DAAA09-01-C-DR17/001	Mobile parts hospital concept design	Army
DAAA09-01-C-DR17	None <sup>3</sup>	Army
<b>Watervliet Arsenal:</b>		
DAAA09-01-C-DR06/004	105 millimeter M68A1E5 cannon	Army
DAAA09-01-C-DR06/002	Modify 105 millimeter breech mechanism	Army
DAAA09-01-C-DR06/001	105 millimeter breech mechanism	Army
DAAA09-01-C-DR06	105 millimeter M68 (Mod) gun tube	Army
DAAA09-01-C-DR04	Advanced gun system prototype	Army
<sup>1</sup> Contract awarded prior to FY 2001. Amounts reflect work performed and incremental payments from October 2000 through November 2002.		
<sup>2</sup> JMC Direct Sales Office mistakenly duplicated contract number.		
<sup>3</sup> Contract was a basic ordering agreement. The contract had no value and no product or service resulted.		

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## Appendix C. Issues and Results

The IG DoD performed this audit as required by the National Defense Authorization Act for 1998, section 141, subsection (c), and reauthorized by the National Defense Authorization Act for 2003. The issues in section 141, subsection (c), and results are as follows.

**Issue 1.** “The Inspector General’s views regarding the extent to which the waiver under subsection (b) enhances the opportunity for United States manufacturers, assemblers, developers, and other concerns to enter into or participate in contracts and teaming arrangements with Army industrial facilities under weapon system programs of the Department of Defense.”

**Results.** Based on a review of Pilot Program contracts issued from September 1998 through November 2002 and discussions with personnel at the facilities reviewed, we believe that, although the waiver increased opportunities for U.S. concerns to form working relationships with Army industrial facilities, little interest was shown by the U.S. concerns. Opportunities resulting from the Pilot Program have marginally increased since the first contract was issued in September 1998 under the Pilot Program. For the first 25-month period (September 1998 through September 2000), about \$6 million was awarded under the Pilot Program. Of the \$6 million, \$5.2 million was one contract incrementally funded over a 5-year period. During the next 26-month period (October 2000 through November 2002), about \$16.9 million was awarded, which includes about \$1.4 million in incremental payments received from prior awards. (See Appendix B for a listing of October 2000 through November 2002 Pilot Program contract actions.) The increase in Pilot Program activity is primarily due to WVA, which does not recognize any contracts as being issued under the Pilot Program (see Issue 4). Personnel at the Army industrial facilities stated that the facilities would have received a large portion of the contracts with or without the advantages of the waiver or the Pilot Program. The statements were based on the industrial facilities receiving the contracts because of no commercial sources.

**Issue 2.** “The Inspector General’s views regarding the extent to which the waiver under subsection (b) enhances the opportunity for Army industrial facilities referred to in section 4543(a) of title 10, United States Code, to enter into or participate in contracts and teaming arrangements with United States manufacturers, assemblers, developers, and other concerns under weapon system programs of the Department of Defense.”

**Results.** Similar to Issue 1, any enhanced opportunity the Pilot Program offers is difficult to identify because of a lack of interest and the low number of contracts issued using the waiver. Additionally, the facilities reviewed have little or no funding allocated specifically for marketing of the Pilot Program. Marketing of the Pilot Program is usually accomplished in conjunction with other facility programs.

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Of the contracts issued, the Army industrial facilities and JMC personnel believe the facilities would have received most of the contracts without the use of the waiver in subsection (b). Also, the three Pilot Program sites maintain little data regarding Pilot Program bids and why U.S. concerns did not award contracts for bids submitted under the Pilot Program.

**Issue 3.** “The Inspector General’s views regarding the effect of the waiver under subsection (b) on the ability of small businesses to compete for the sale of manufactured articles or services in the United States in competitions to enter into or participate in contracts and teaming arrangements under weapon system programs of the Department of Defense.”

**Results.** We cannot determine the effect the program had on small businesses because only 19 basic contracts that used the waiver under subsection (b) were awarded between September 1998 and November 2002. We did not identify any opportunities or detriments to small businesses because of the waiver.

**Issue 4.** “Specific examples under the Pilot Program that support the Inspector General’s views.”

**Results.** Because of the nature of work performed on the contracts under the Pilot Program, JMC officials believe that the Army industrial facilities would have received most of the work regardless of the waiver. Based on our review of contract documentation, Army industrial facilities received similar awards before the Pilot Program. When meeting with personnel at WVA, we were told that the contracts would have been awarded to the facilities because of no commercial sources.

The most obvious examples for the previous statement are the contracts awarded to WVA. JMC officials provided a list of Pilot Program contracts for WVA, which contained three contracts and three orders on one of those contracts. WVA believes they would have been awarded the contracts regardless of the waiver and denied that the contracts were issued under the Pilot Program. Through discussions, we determined that JMC considered the contracts under the Pilot Program because the contracts included a waiver of the need to determine commercial sources. JMC personnel admitted that many Pilot Program contracts would have been awarded without the benefits of the waiver.

We identified misunderstandings between JMC and the Army industrial facilities reviewed regarding Pilot Program classification. The JMC contracting officer stated by including the statement that waived the obligation to identify commercial sources determined the classification of a Pilot Program contract. That belief is not, however, the same belief the Army industrial facilities shared. Misunderstandings in determining whether a contract was issued under the Pilot Program hindered reporting Pilot Program achievements (see page 8 of the finding for additional details).



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**Issue 5.** “Any other information that the Inspector General considers pertinent regarding the effects of the waiver of section 4543(a)(5) of title 10, United States Code, under the Pilot Program on opportunities for United States manufacturers, assemblers, developers, or other concerns, and for Army industrial facilities, to enter into or participate in contracts and teaming arrangements under weapon system programs of the Department of Defense.”

**Results.** With one exception, the hourly overhead rates that the Army industrial facilities charge have declined since the last IG DoD audit of the Pilot Program. The overhead rates for MCAAP declined about 14.29 percent between FY 2001 and FY 2002 and 15.7 percent between FY 2002 and FY 2003. The overhead rates for RIA declined about 6.5 percent between FY 2001 and FY 2002 and 12.7 percent between FY 2002 and FY 2003. Overhead rates for WVA decreased 4.8 percent between FY 2001 and FY 2002 but increased 8.4 percent between FY 2002 and FY 2003. The decreased overhead rates allow the industrial facilities to be more cost competitive when submitting bids for Pilot Program work. The declining overhead rates may be attributed to implementation of programs such as the Arsenal Support Program Initiative and other private-public partnership arrangements at the facilities. Those programs are designed to defray the cost for operating and maintaining any underutilized facilities by allowing commercial tenants to utilize excess industrial facility space. Although the Pilot Program does not apply to Anniston Army Depot, the public-private partnerships the depot used were effective in reducing the Government’s cost to maintain the facility.

Based on prior IG DoD reports as well as our interviews with Army industrial facility personnel during the audit, the requirements that contractors pay before receiving articles and services (advance payments) and that Army industrial facilities charge full costs have hindered the effectiveness of the Pilot Program (see pages 4 and 5 of the finding for additional details).

According to statements and information provided by the facilities reviewed, most workers at the three Army industrial facilities are eligible for retirement within the next 5 to 10 years. Large numbers of skilled workers retiring threatens the effectiveness of the Army industrial facility programs. Reductions in force and the lack of apprenticeship programs at the Army industrial facilities reviewed have threatened the Army’s ability to maintain a skilled workforce. MCAAP uses a program for students for which the students gain work experience with MCAAP while completing their education. Students may be non-competitively offered career-conditional appointments with MCAAP upon successful completion of their academic requirements. Apprenticeships have resumed at RIA, but lack of funding has hindered the progress at RIA and has prevented WVA from reinitiating their apprentice programs. Building and retaining a skilled workforce is critical to the facilities because many skilled employees were lost during the reductions in force.

**Issue 6.** “Any recommendations that the Inspector General considers appropriate regarding continuation or modification of the policy set forth in section 4543(a)(5) of title 10, United States Code.”

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**Results.** We have not identified any adverse effects of the program, although limited benefits were identified. We believe the Pilot Program should be continued. RIA noted that participating in the Pilot Program does not increase the cost of the facility. The ability of the Army industrial facilities to identify strengths and shortfalls of the program would be enhanced by increased monitoring of the program and data related to the bids submitted under the Pilot Program. However, an increased administrative burden may result from such monitoring. The Army industrial facilities could make adjustments to policies and procedures based on the additional data obtained when bids are submitted resulting in no awards and work performed at the facilities. In addition to increased monitoring of the Pilot Program, better marketing would raise awareness of the Pilot Program. An increase in monitoring and awareness of the Pilot Program along with implementation of other public-private partnership programs would likely be beneficial in increasing the workload at the three participating Army industrial facilities. (See the Finding section for additional details.)

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## **Appendix D. Report Distribution**

### **Office of the Secretary of Defense**

Under Secretary of Defense for Acquisition, Technology, and Logistics  
Under Secretary of Defense (Comptroller)/Chief Financial Officer  
Deputy Chief Financial Officer  
Deputy Comptroller (Program/Budget)

### **Department of the Army**

Assistant Secretary of the Army for Acquisition, Logistics, and Technology  
Assistant Secretary of the Army (Financial Management and Comptroller)  
Commander, Army Material Command  
Commander, U.S. Army Joint Munitions Command  
Commander, McAlester Army Ammunition Plant  
Commander, U.S. Army Tank-automotive and Armaments Command  
Commander, Anniston Army Depot  
Commander, Rock Island Arsenal  
Commander, Watervliet Arsenal  
Auditor General, Department of the Army

### **Department of the Navy**

Auditor General, Department of the Navy

### **Department of the Air Force**

Auditor General, Department of the Air Force

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## **Congressional Committees and Subcommittees, Chairman and Ranking Minority Member**

Senate Committee on Appropriations  
Senate Subcommittee on Defense, Committee on Appropriations  
Senate Committee on Armed Services  
Senate Committee on Governmental Affairs  
House Committee on Appropriations  
House Subcommittee on Defense, Committee on Appropriations  
House Committee on Armed Services  
House Committee on Government Reform  
House Subcommittee on Government Efficiency and Financial Management, Committee on Government Reform  
House Subcommittee on National Security, Emerging Threats, and International Relations, Committee on Government Reform  
House Subcommittee on Technology, Information Policy, Intergovernmental Relations, and the Census, Committee on Government Reform

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The Contract Management Directorate, Office of the Deputy Inspector General for Auditing of the Department of Defense prepared this report. Personnel of the Office of the Inspector General of the Department of Defense who contributed to the report are listed below.

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